



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,828	08/20/2003	Lars LARSSON	07589.0122.PCUS00	1827
28694	7590	06/21/2004	EXAMINER	
TRACY W. DRUCE, ESQ. 1496 EVANS FARM DR MCLEAN, VA 22101			GUSHI, ROSS N	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/604,828	LARSSON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ross N. Gushi	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 3, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 2, 3, “the insert portion . . . .” lacks antecedent basis and is unclear and confusing. The limitation is given little weight.

Regarding claim 6, the limitation of the “thread being non-uniform” is indefinite. What exactly does it mean for a thread to be “non-uniform.” Does it mean the thread is not standard or not the same as itself (and what would that mean)? The limitation is treated as meaning that the thread is one of the variety of known locking threadforms.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehring et al. (“Gehring”) in view of DeLeo.

Regarding claim 1, Gehring discloses grounding element 10 for (i.e. capable of) making possible an electrical connection between a structural element and an electrical terminal, said grounding element comprising a first portion 14; a second portion 12 provided with a thread, a central section (16) connecting the first portion to the second portion and the central section having a first contact surface 17 in a plane where the central section is connected to the second portion and the first portion having a thread and the central section having a portion with at least one projecting ridge 42.

Gehring shows a non-metallic support member 22, and declares that “the stud member . . . works equally well in workpieces of a metallic composition.” Col. 2, lines 65-69, emphasis added. Deleo explicitly shows a ground bus 30. At the time of the invention, it would have been obvious to use the Gehring grounding element in a conductive ground bus as taught in DeLeo. The suggestion or motivation for doing so would have been to facilitate grounding of devices through a ground stud and bus, as taught in DeLeo and as is well known in the art.

Per claim 7, the first contact surface is provided with at least one projection extending therefrom (col. 3, lines 20-25).

Claims 11, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gehring and DeLeo in view of the admitted prior art (“APA”). DeLeo and Gehring do not state that the grounded support member is part of a vehicle. The APA indicates that on vehicles, “the grounding points normally consist either of a grounding plate where flat pins or ring shoes can be mounted, or of a bolt where ring terminals can be attached. Grounding plates can, for example, be screwed or riveted to the chassis, and

Art Unit: 2833

the bolt can consist of, for example, a spot-welded pin bolt.” Specification page 2. At the time of the invention, it would have been obvious that the ground plate shown in DeLeo could alternatively be the ground plate in various applications, including the ground plate of a vehicle as discussed regarding the APA. The suggestion or motivation for using the Gehring stud on a vehicle ground plate would have been to facilitate grounding of various components, as is well known in the art.

Per claim 3, the central section further comprises a disk-shaped portion, one side surface of which forms the first contact surface.

Per claim 4, an edge of a disk-shaped portion of the central section has at least two parallel surfaces.

Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehring and DeLeo as in claim 1 in view of Goldby. Gehring does not show a locking threadform. Goldby discloses a locking threadform. At the time of the invention, it would have been obvious to use a locking threadform on the Gehring threads as taught in Goldby. The suggestion or motivation for doing so would have been to prevent a nut from unthreading as taught in Goldby and as is well known in the art.

Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gulistan in view of DeLeo.

Per claims 8 and 10, Gulistan discloses an elongate grounding element for (i.e. capable of) affecting and facilitating an electrically grounded connection, the elongate grounding element comprising an elongate body having a longitudinal axis and at least an externally threaded portion 39, said threaded portion having an insertible portion

configured for non-threaded engagement with a support member (40, 45) when said threaded portion is inserted through a provided aperture in the support member; and a means 38 for (i.e. capable of) enhancing electrically conductive contact between the elongate body and the support member, said enhancement means comprising elongate ridges 38 radially extending off of a central portion of the elongate body, said central portion being configured for non-twisting insertion into the provided aperture in the support member in a direction substantially parallel to the longitudinal axis of the elongate body, said elongate ridges forming an interference fit with the support member at a periphery of the provided aperture, and support member 44. To the extent that Gulistan does not state that the support member is grounded, at the time of the invention, it would have been obvious to ground the support member as taught in DeLeo. The suggestion or motivation for doing so would have been to facilitate grounding of devices as taught in DeLeo.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gulistan and DeLeo as discussed regarding claim 8 in view of the APA as discussed regarding claim 11. The APA indicates that on vehicles, "the grounding points normally consist either of a grounding plate where flat pins or ring shoes can be mounted, or of a bolt where ring terminals can be attached. Grounding plates can, for example, be screwed or riveted to the chassis, and the bolt can consist of, for example, a spot-welded pin bolt." Specification page 2. At the time of the invention, it would have been obvious that the ground plate shown in DeLeo could alternatively be the ground plate in various applications, including the ground plate of a vehicle as discussed regarding the APA.



The suggestion or motivation for using the Gulistan stud on a vehicle ground plate would have been to facilitate grounding of various components, as is well known in the art.

Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Gulistan in view of DeLeo as in claim 10 in view of Attwood '797. The Gulistan insert portion is not a truncated cone. Attwood discloses an insert section 12 that is a truncated cone. At the time of the invention, it would have been obvious to modify the Gulistan insert portion to be a truncated cone as taught in Attwood. The suggestion or motivation for doing so would have been to facilitate insertion and securement of the stud in the support as taught in Attwood and as is well known in the art.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehring, DeLeo, and the APA as discussed regarding claim 11 in view of Attwood. Gehring does not disclose that the central section further comprises a truncated cone having a tip end interconnected with the first portion. Attwood discloses a fastener including a section 12 (analogous to flange 16 in Gehring) which comprises a truncated cone having a tip end interconnected with a threaded portion. At the time of the invention, it would have been obvious to modify the Gehring flange to include a conical section with teeth as taught in Attwood. The suggestion or motivation for doing so would have been to better facilitate the transmission of stress between the fastener and the support structure as taught in Attwood.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gehring, DeLeo, and the APA as discussed regarding claim 4 in view of Grow. Gehring does not

Art Unit: 2833

disclose that the disk-shaped portion is a mechanical element with an internally threaded hole, which is mounted on the grounding element. Grow discloses a stud 47 and a disk-shaped portion 36 which is a mechanical element with an internally threaded hole, which is mounted on the stud. At the time of the invention, it would have been obvious to attach the Gehring flange using a threaded bore as taught in Grow. The suggestion or motivation for doing so would have been to be able to adjust the location of the flange axially and adjust the relative lengths of the stud shanks, as taught in Grow and as is well known in the art.

### ***Response to Arguments***

Regarding Gehring, Applicant extensively quotes Gehring including the sentence regarding the "plastic composition workpiece" but curiously ignores the most pertinent remainder of that very sentence, that "the stud member . . . works equally well in workpieces of a metallic composition." Col. 2, lines 65-69, emphasis added. Therefore applicant's arguments regarding Gehring are not persuasive.

Regarding Gulistan, the examiner does not follow applicant's argument and has no comment on it.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (703) 306-4508. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at (703) 308-2319. The phone number for the Group's facsimile is (703) 872-9306.

  
**ROSS GUSHI**  
**EXAMINER**